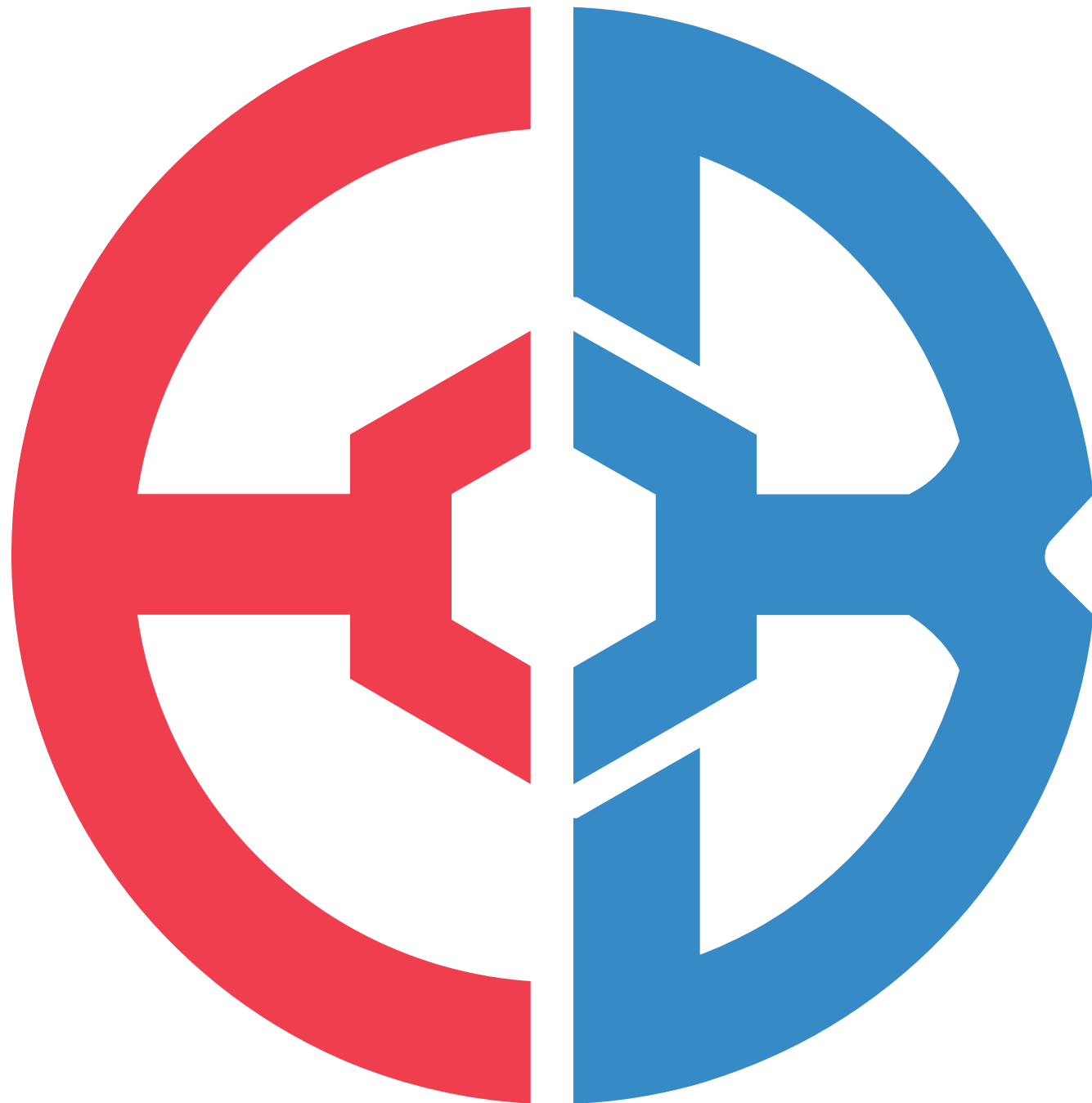




[WWW.ENERGYBOLTING.COM](http://WWW.ENERGYBOLTING.COM)



## ABOUT US

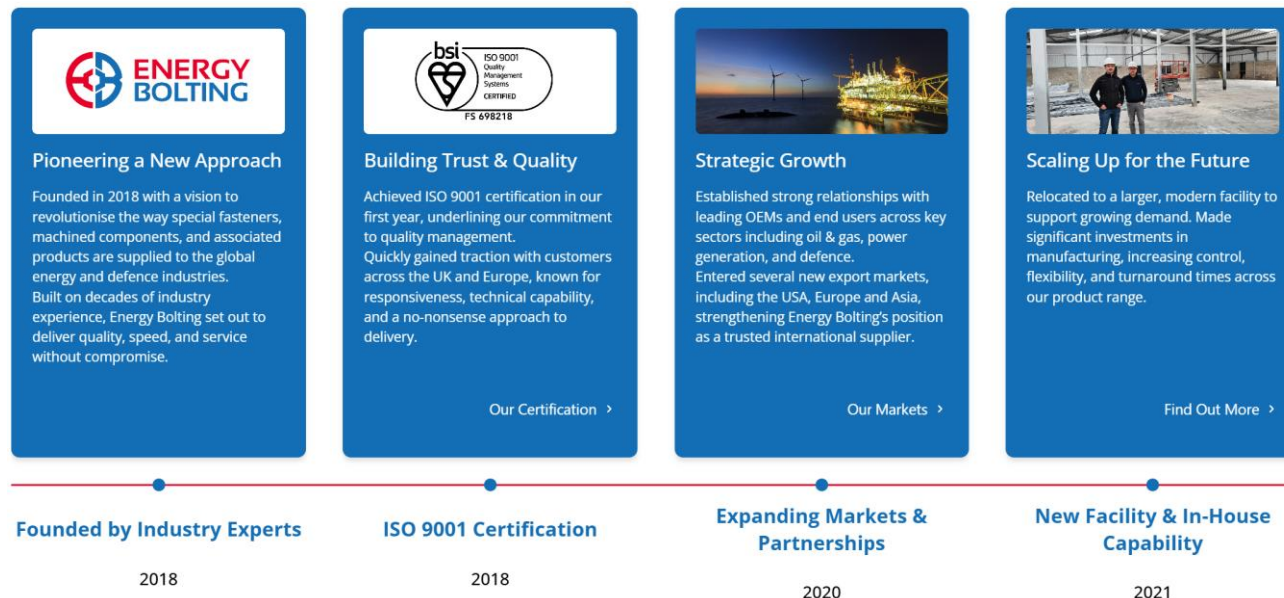
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Energy Bolting is a customer focused manufacturer of special fasteners, machined components and associated products to global energy & defence industries.

With many years of specialist experience, we understand the needs of critical industry across the globe and are committed to working together to meet those needs.

Our mission is to become the supplier of choice through focus on delivering amazing outcomes for customers.

# OUR JOURNEY



# OUR VALUES

## Service Culture

Getting it right for our customers drives every decision we make.

We exist to deliver truly exceptional service that makes a positive impact on our customers' business lives.

## Commitment To Quality

We believe that quality is an obligation and a responsibility.

We hold certification and accreditation for our compliance to some of the most demanding globally-recognised standards: ISO 9001:2015, PED 2014/68/EU, AD2000, API Q1, API 20E-0098, API 20F-0048 & JOSCAR



## Trusted Partnerships

We demand integrity and accountability from our team and our suppliers. We have honest conversations and won't make promises that we know we can't keep. We strive to find the best solutions for our clients' problems

## Measurable Results

We analyse data produced by measurement against our key performance indicators and use it to promote continuous improvement.

We ask customers to score their key interactions with us and use the information received to improve our services.

# MARKETS SERVED AND PRODUCT APPLICATIONS



## Oil & Gas

Upstream (exploration / production), Midstream (process / storage) & Downstream (refinery / plants)



## Power Generation & Renewables

Turbines, Motors & Generators, Nuclear Plant, Wind Farms, Solar Equipment & Natural Gas Systems.



## Marine & Defence

Construction, service and repair of: Submarines, Topside Modules, FPSO & Jack Up Vessels.



## Petrochemical / Fertilizer

Polyethylene / Polypropylene, Ammonia & Urea Production.



## Pharmaceutical / Life Sciences

Laboratory / Chromatography Equipment: Columns, Tanks & Purification Systems.



## Process Equipment

Heat Exchangers, Filtration, Pressure Vessels, Mixers, Dryers, Scrubbers, Tanks & Boilers



## Flow Control

Valves, Pumps, Actuators & Compressors



## Engineering & Fabrication

Pipework / Pipeline Projects, Skid Units, Construction Projects, Plant Maintenance & Repair



## Lifting Equipment

Offshore / Marine Cranes, Tower Cranes, Slewing Ring Connections, Wharf Cranes.



## API Equipment

Blow Out Preventers (BOPs), Risers, Manifolds, Drilling Equipment, Valves, Wellheads, Trees, Connectors High Pressure / High Temperature Equipment (HPHT)



# PRODUCTS

Production standards include: [ASTM](#), [ANSI](#), [DIN](#), [ISO](#), [API](#), [British Standards](#), [Def Stan](#) and [Werkstoff Grades](#).

Urgent requirements are fulfilled on the shortest lead times. Project requirements and large batch quantities are supplied competitively and are scheduled to suit demand.



## STUDBOLTS

- Threaded Bars
- Studbolts



## HEADED PRODUCTS

- Hexagon Bolts
- Hexagon Set Screws
- Socket Head Cap Screws
- Flange Bolts
- Slewing Ring Bolts
- 12PT Bi Hex Bolts
- Square Head Bolts
- Eye Bolts



## NUTS & WASHERS

- Hexagon Nuts
- Spherical Nuts
- Drilled/Tapped Nuts
- Round/Flat Washers
- Spherical Washer Sets



## BESPOKE MACHINED PARTS

- Waisted Studs
- Double Ended Studs
- Tap-End Studs
- Collar Studs
- Hex Cap Nuts
- Shafts
- Pistons
- Shear Pins



## ASSOCIATED PRODUCTS

- Flanges
- Fittings
- Blinds / Spacers,
- Gaskets, Spades
- Ring Joints
- Isolation Kits
- Seal Rings
- U-Bolts

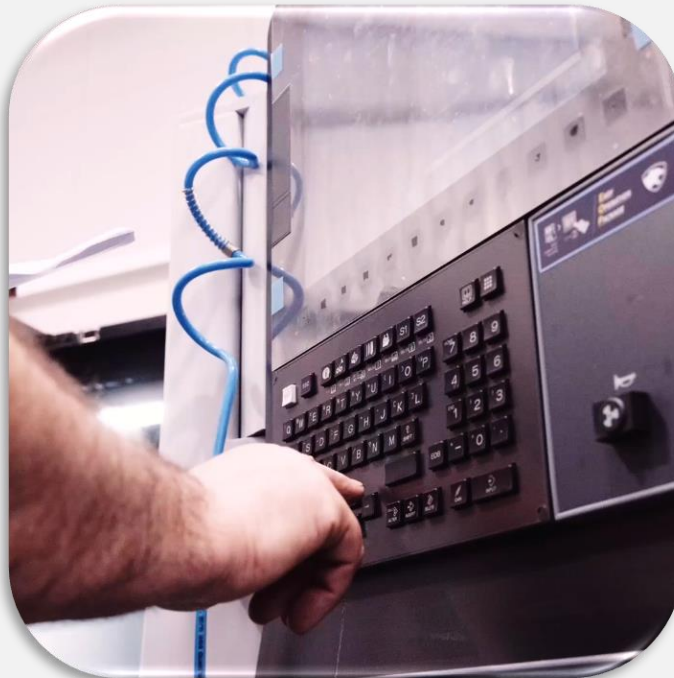
**Special threaded components manufactured to customer drawings and specifications**

# MANUFACTURING

Our state-of-the-art manufacturing facility produces specialised fasteners and machined components to client drawings and specifications.

Manufacturing Processes Include:

Hot Forging - Cold Forming - CNC Milling - CNC Bar Turning - CNC Polygonal Turning - Screw Cutting - Thread rolling - Surface & Centreless Grinding - Etching - Part Marking



# API BOLTING

API 20E and 20F bolting is required for various equipment and products being manufactured to API standards.

These products include:

Blow Out Preventers (BOPs), Risers, Manifolds, Drilling Equipment, Valves, Wellheads, Trees, Connectors, High Pressure / High Temperature Equipment (HPHT)



## API 20E (Alloy and Carbon Steel Bolting) / 20F (Corrosion Resistant Bolting)

- These standards establish requirements for different bolting specification levels (BSL). The BSL designations define different levels of technical, quality and qualification requirements. The highest criticality level (BSL-3) is reserved for applications where bolting failure is not an option.
- Energy Bolting hold API licenses with the authority to mark compliant bolting with the API monogram registered mark: **API-20E (BSL 1,2,3) and API-20F (BSL 2,3)**
- Typical products include: Fully Threaded Studbolts, Hexagon Nuts, Tap End Studs, Flange (Collar Bolts) Hexagon Bolts Socket Head Capscrews & 12point Bolts / Nuts.
- Urgent requirements are fulfilled on the shortest lead times. Project requirements and large batch quantities are supplied competitively and are scheduled to suit demand.



# FIRST LEVEL FASTENERS

Energy Bolting manufacture fasteners and machined components to MOD (Ministry of Defence)  
DEF STAN 02-862 Issue 3.

The complete Def Stan 02-862 Issue 3 comprises:

Part 1: Naval Fasteners - Material Selection and Use

Part 2: Naval Fasteners - Procurement of Non-First Level Fasteners

Part 3: Naval Fasteners - Procurement of First Level Fasteners



- First Level items comply with the requirements of SSP 25 which gives the following definition: Where the consequences of failure of a hull area, system, equipment or component are such that it would lead to loss of the submarine, or potentially the loss of fission products, these areas, systems, equipments or components will be classified FIRST LEVEL and additional Quality Assurance measures will be implemented.
- For First Level carbon and low alloy steel fasteners a series of three standard grades has been developed for metric and unified threaded steel bolts, screws, studs, studbolts and nuts (including prevailing-torque type nuts for SM1-M and SM1-U grades only).
- Energy Bolting have raw material stocks, approved supply chain procedures and UKAS accredited test laboratories suitable for the supply of first level fasteners.
- Typical First Level Fastener Requirements include: Studbolts, Engineer Studs, Hex Nuts, Nyloc Nuts , Washers & Machined Components to customer drawings

# PRODUCT GALLERY





## Fully Traceable Material

CARBON & ALLOY STEEL	STAINLESS STEEL		NICKEL ALLOYS	DUPLEX & SUPER DUPLEX	NON FERROUS
B7 / B7M	B8 Class 1 & 2	A2/A4 Class 50-80	Inconel® 625	UNS S32760	Hiduron®
L7 / L7M	B8M Class 1 & 2	UNS S31254 / 254SMO	Inconel® 718	UNS S32750	Copper Nickel
L43	B8T Class 1 & 2	Nitronic 50®	Inconel® 800 (HT)	UNS S31803	Aluminum Bronze
8.8	B8C	Nitronic 60®	Inconel® 825	UNS S32550	Phosphor Bronze
10.9	B6	Urea - 25.22.2®	Inconel® 925	HEAT RESISTING	Titanium Grade 2
12.9	660 A, B, C, D	310	Hastelloy® C-276		Titanium Grade 5
B23 Class 1 - 5	17/4 PH	321	Hastelloy® C-22	B16	Titanium Grade 7
B24 Class 1 - 5	DEF STAN 02-862	410	Hastelloy® X	Durehete 1055™	NES 833/834/835
DEF STAN 02-862			Monel® 400	Nimonic 80A™	C63000 / C63200
			Monel® K500	Nimonic 90™	Def Stan Materials

Corresponding nut and washer grade materials are available.  
This material list is not exhaustive - contact us to find out if we can help.



## MANUFACTURING

Screw Cutting - Thread Rolling - Hot Forging - Cold Forming - CNC Milling - CNC Turning - CNC Polygonal Turning - Surface & Centreless Grinding - Etching - Part Marking



## HEAT TREATMENT

Hardening & Tempering - Normalizing / Stress Relieving - Nitro Carburizing - Case Hardening - Solution Annealing - Age Hardening



## PROJECT MANAGEMENT & SERVICE

24 Hour Service - Technical Support - AVL - Trusted Partnerships - Performance Tracked & Shared - Customer Feedback - Customer Driven Improvement - Exceptional Outcomes



## OPERATIONAL SOLUTIONS

Kit assembly - Stock Production - Consignment Stock - Scheduled Deliveries - Custom Packaging - Special Product Marking



## TESTING

Impact & Tensile Testing - Liquid Penetrant (LPI) & Magnetic Particle Inspection (MPI) - Ultrasonic Testing - Positive Material Identification (PMI) - Hardness Testing - Full Metrology



## DOCUMENTATION

EN10204 3.1&3.2 - EN16228 F3.1&F3.2 - Independent Witness Reports - CofC - Inspection and Test Plan (ITP) - Dimensional Reports - Lab Reports - NDT, PMI & Hardness Reports - Coating Reports - Trace Coding



## COATING & SURFACE TREATMENTS

Zinc with Clear or Colour Passivation - Zinc Nickel - Hot Dip Galvanising - Sherardizing - Cadmium - PTFE (Xylan®) - Copper Plating - Chemical Blacking - Phosphating - Geomet® - Dacromet®



## GLOBAL REACH

Delivery terms to suit client requirements including: Ex-works - FOB - CIF by air, sea and road freight. Transactions accepted in GBP - USD & EUR



# QUALITY



**TÜVNORD**  
PED: 0045/202/WZ/2650/23  
TN/AD2000-W0/2650/23



- We operate a quality management system certified to ISO 9001:2015 by the British Standards Institution (BSI) and API Q1 by the American Petroleum Institute. Additional certification includes: PED 2014/68/EU, MERKBLATT AD2000 W0 by TUV & JOSCAR. Energy Bolting hold API licenses with the authority to mark compliant bolting with the API monogram registered mark: API-20E (BSL 1,2,3) and API-20F (BSL 2,3)
- We are committed to supply quality product using our industry expertise and trusted supply chain to provide tailored advice, technical support and quality solutions to meet customer requirements.
- Energy Bolting offers a full range of inspection and testing (destructive and non-destructive) to ensure product conformity. Strict traceability is maintained at each stage of manufacture and inspection.



## DOCUMENTATION

- Certificate of Conformity
- 2.1 / 2.2 Certificate
- 3.1 to BS EN 10204
- F3.1 to ISO 16228
- 3.2 - Independent Inspection (Lloyds, DNV, TUV)
- Manufacturing Process Plan
- Quality Plan
- Inspection & Test Plan
- Third Party Test Report
- Dimensional Report
- Document Pack

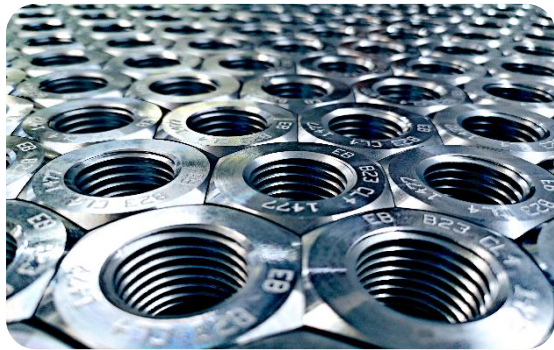


## DESTRUCTIVE & NON-DESTRUCTIVE TESTING

- Tensile (Ambient / Elevated)
- Impact / Charpy (Ambient / Sub-Zero)
- Stress Rupture
- Decarburisation
- Carburisation
- Hardness
- Proof Load
- PMI (Positive Material Identification)
- MPI (Magnetic Particle Inspection)
- Dye Penetrant
- Microstructure
- Macroetch
- Ultrasonic
- Chemical Analysis

# CASE STUDY – Technical Support

Client	High Pressure Equipment Manufacturer
Application	HP Piping System
End User	China – Polyethylene Plant
Product	Studbolt ASME SA-540 B23 Class 1 – PTFE coated / Hex Nuts ASME SA-540 B23 Class 4



- Our client was working to a short project schedule and required fasteners manufactured to drawings with a supplementary end user specification.
- ASME SA-540 B23 is a high alloy bolting material often used for nuclear and other special applications.
- In addition to ASTM the end user specification imposed further restrictions on the material properties.
- The certification level was EN10204 3.2 with DNV witness. The Inspection Test Plan also included customer hold and inspection points.
- Energy Bolting committed to meet the exacting specification and the requested delivery date.
- The order was delivered on-time in full accordance with all specification.

# CASE STUDY – Critical Supply

Client

Petrochemical Company

Application

Catalyst Tube Assembly

End User

Oil Refinery

Product

Precision Machined Ring Joint Gaskets. Material 310 ST/ST



- Energy Bolting was contacted with an extremely urgent requirement. Gaskets were required on site within days to resolve an unexpected issue during planned maintenance at the refinery.
- Ring joint gaskets are not stocked in 310 st/st material and are normally produced on a lead time of 3 weeks or more.
- Energy Bolting offered the client exactly what they needed: goods on site within 3 days!
- Parts were produced from European raw material, fully inspected and ready to ship in 2 days
- A member of the Energy Bolting team hand carried the goods and delivered to the refinery on-time.
- The client was satisfied with our performance and support in meeting their critical deadline.

# CASE STUDY – Competitive Project Solutions

Client

EPC Contractor

Application

Gas Units

End User

Karachaganak (KPO)

Product

Hexagon Bolts, Nuts & Washers – Hot Dip Galvanised. Material: ASTM A320 L7 & L7M



- A competitive tender was received for project bolting.
- The fastener requirement was for over 100 unique line items with a total of 150,000 pcs and a delivery time of 18 weeks.
- Energy Bolting's bid was successful and the order was received.
- Our approved and trusted supply chain was used to source raw materials, semi-finished and finished goods in accordance with the project requirements.
- The shipment required special packaging and documentation including: project labelling part numbers and references, packing lists, export declaration and certificate of origin.
- The order was delivered on time in accordance with scheduled delivery dates to meet project build deadlines.



# OUR LEADERSHIP TEAM



**ROBIN HART-ARCHER**  
Managing Director



24 years in the fastener manufacturing and supply industry - leading sales & marketing teams to exceptional results and maintaining the highest levels of customer satisfaction.



**DAN PEARCE**  
Sales Director



19 years working in the fastener and pipeline component manufacturing industry. Specialising in sales, business development and providing clients with critical supply solutions.



**RICHARD HARRIS**  
Technical Director



Richard has over 30 years experience of special fastener manufacture. He brings his knowledge of quality management systems, production, materials, technical specifications and metrology to the company.

[\*\*FIND OUT MORE\*\*](#)



# OUR BLOG

Engaging our audience and getting to know them is important for Energy Bolting. We post our performance and product information, news and regular updates.

Visit our website to find out more.



## [Case Studies](#)

A selection of previous supplies.



## [All Posts](#)

All updates from Energy Bolting



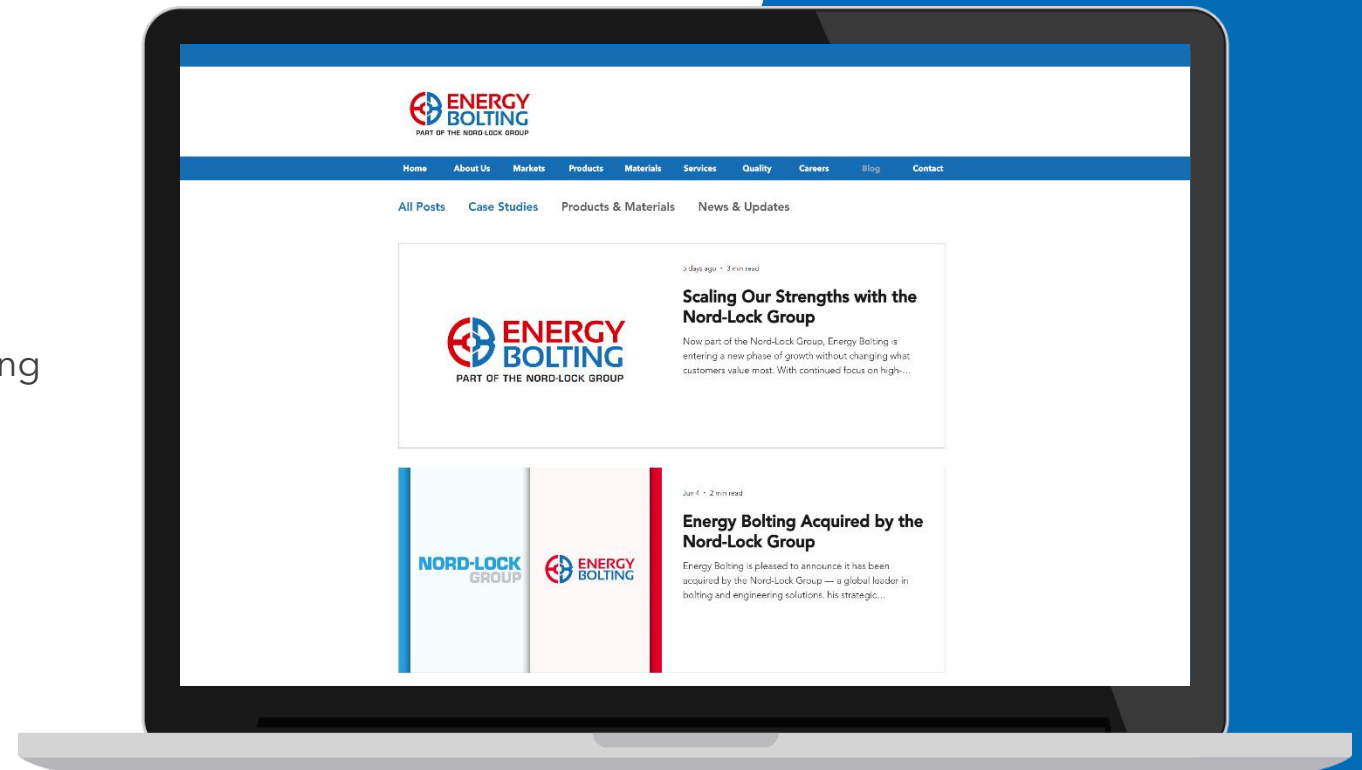
## [Products & Materials](#)

An indication of our range.



## [News & Updates](#)

Latest information.



# CONTACT US



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